

Remarks

Applicants respectfully request reconsideration of the present U.S. Patent application, as presently amended, in light of the remarks in this paper.

Claims 1-18 have been rejected. Claims 19-24 have been withdrawn previously. Claims 1, 4, 7-9, 10, 13, and 16-18 are presently amended. No claims are presently cancelled or added. Thus, claims 1-18 are pending.

INFORMALITIES

Amendment to claim 1 corrects one informality to which the Office objected and the comments below traverses the other objection to claim 1. Amendments to claims 4, 7, 13, and 16 correct the informalities to which the Office objected. Amendment to claim 10 corrects an unnoted informality.

The Office objected to “the number” in claim 1 as having insufficient antecedent basis. However, Applicants direct attention to line 3 of claim 1 which recites “... a number of network devices ...”, line 7 of claim 1 which recites “... a number of subsets...” and finally line 10 of claim 1 which recites “... the number of subsets...”. Consequently, Applicants respectfully submit “the number”, which when read in context includes “... the number of subsets...”, has sufficient antecedent basis and requires no amendment.

35 U.S.C. § 101 REJECTIONS

Claims 4, 7, 13, and 16 stand rejected under 35 U.S.C. § 101 as claiming non-statutory subject matter. Applicants respectfully traverse the rejection to claims 4 and 13

in view of the comments below and overcome the rejection to claims 7 and 16 in view of the amendments above and comments below.

The Office Action characterizes claims 4 and 13 as reciting non-functional descriptive material, i.e., mere data that does not impart functionality to either data or to a computer. Applicants respectfully submit that the Office has incorrectly characterized claims 4 and 13, and furthermore, has incorrectly applied the analysis required under 35 U.S.C. § 101 as outlined in the Examination Guidelines for Computer-Related Inventions issued by the United States Patent and Trademark Office in 1996 (PTO Guidelines).

Claims 4 and 13 recite “An article comprising a machine-accessible medium ...” Both claims go on to recite elements related to the configuration, organization, or structure of the storage medium. Page 9 of the PTO guidelines states: “In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the medium which permit the data structure’s functionality to be realized, and is thus statutory.” Clearly, as one example, recital of “An article ...” performing functions in claims 4 and 13 is recital of statutory subject matter.

Moreover, the Office Action referred to claims 4 and 13 as “just limited to functional descriptive material.” Applicants respectfully point out that “anything under the sun made by man” is patentable subject matter. Diamond v. Diehr, 450 U.S. 175, 182 (1981). Both claims recite “An article comprising ...,” which is clearly made by man and is more than mere functional descriptive material. Consequently, claims 4 and 13 recite statutory subject matter as defined by the U.S. Supreme Court in Diamond v. Diehr and

outlined in the referenced PTO guidelines. Accordingly, Applicant respectfully traverses the rejection of claims 4 and 13.

Applicants' amendments to claims 7 and 16 recite "a tangible machine-accessible medium ..." with further elements related to the configuration, organization, or structure of the storage medium. Consequently, for reasons similar to those above in support of claims 4 and 13, the rejection to claims 7 and 16 have been overcome by the amendments shown above.

Claims 5-6, 8-9, 14-15, and 17-18 depend from claims 4, 7, 13, and 16, respectively, and thereby incorporate by reference the elements of claims 4, 7, 13, and 16, respectively. Consequently, the rejections to claims 5-6, 8-9, 14-15, and 17-18 are traversed or overcome for at least the reasons above with respect to claims 4, 7, 13, and 16.

REJECTIONS UNDER 35 U.S.C. §103(A)

Claims 1-18 stand rejected under 35 U.S.C. §103(a) as being obvious and thus unpatentable over Yuasa, et al. (U.S. Patent No. 6,085,238; "YUASA") in view of Iwamura, et al. (U.S. Patent No. 6,396,814; "IWAMURA"). Applicants respectfully traverse the rejection to claims 1-18 in view of the comments that follow.

The independent claims 1, 4, 7, 10, 13, and 16, include elements that are not taught or suggested by combination of YUASA and IWAMURA. It is well established that obviousness requires a teaching or a suggestion by the relied upon prior art of all the elements of a claim (M.P.E.P. §2142). Without conceding the appropriateness of the combination, Applicants respectfully submit that the combination of YUASA and

IWAMURA does not meet the requirements of an obvious rejection in that neither teaches nor suggests at least “*limiting subsets of target devices responsive to the second request, in part based on the second request including (1) the number of subsets to which the target devices are divided and (2) a subset index value,*” elements included in independent claim 1 (emphasis and indices added). Claims 4, 7, 10, 13, and 16 recite similar elements.

The Office concedes that YUASA does not disclose the referenced elements of claim 1, but alleges IWAMURA does. OFFICE ACTION 5 (June 5, 2006). On closer examination, however, IWAMURA merely discloses

[E]ach device broadcasts a device message. The device message includes *the information on the device broadcasting it and the information on the communicable devices determined taking the device messages from other devices into consideration*. Each device judges whether it can or cannot communicate with other devices by receiving a device message from them. *Further, the information on the communicable devices thus identified is broadcast with a device message, upon receipt of which each device can collect the data required...*

According to this [the first] embodiment, ... *the number of the devices belonging to each of the segmented groups is substantially equal to a predetermined number N*. By setting the value of N in accordance with the processing capacity of the device, the number of messages that the devices are required to receive can be reduced with minimum increase of the overhead.

IWAMURA, col. 13 line 63 – col. 14 line 16.

Applicants point out that “the information on the device broadcasting it and the information on the communicable devices ...” does not teach any part of the above recited element of claim 1. Applicants further point out that silence is not a proper substitute for an adequate teaching or suggestion of facts from which a conclusion of obviousness may justifiably follow.

IWAMURA goes on to teach grouping devices into clusters wherein each cluster has one representative device. Accordingly, communication between clusters passes through the representative devices while communication within a cluster is allowed directly between devices. IWAMURA, col. 14 lines 32 – 50. Particularly, IWAMURA teaches

Then, one device is selected as a representative device in each group. ... A broadcast address is determined for each group, and the devices in each group communicate with each other using the broadcast address thus determined. In addition to the broadcast address used for communication between the devices in the same group, a broadcast address is set for communication between representative devices.

IWAMURA, col. 14 lines 32 – 40.

Further, each of the other embodiments taught by IWAMURA and relied on by the Office recite operation similar to the teachings discussed above. IWAMURA, col. 17 lines 15 – 17, lines 46-48.

Consequently, IWAMURA does not teach or suggest automated management of network traffic wherein desired clients respond based in part on a request including the number of subsets to which the target devices are divided and a subset index value. The teaching of IWAMURA limits communication to only that between devices in the same cluster or among representative devices. In contrast, a network managed in accordance with claim 1 may allow direct communication between any pair of devices, without use of an intermediary “representative” device. Therefore, as asserted above, IWAMURA fails to disclose or even suggest limiting subsets of target devices responsive to a message, in part based on the message including the number of subsets to which the target devices are divided and a subset index value.

Applicants would like to emphasize that Applicants have shown how YUASA and IWAMURA are each devoid of claimed elements so that, by default, their combination is also devoid of at least some of the elements of Applicants' claim. Applicants also would like emphasize that silence is not a proper substitute for an adequate teaching or suggestion of facts from which a conclusion of obviousness may justifiably follow. Consequently, a combination of YUASA and IWAMURA cannot make Applicants' claim 1 obvious and Applicants submit the rejection of claim 1 has been traversed. Claims 4, 7, 10, 13, and 16 recite elements similar to those of claim 1 and are thus similarly in condition for allowance.

Since claims 2 and 3 depend from claim 1, claims 5 and 6 depend from claim 4, claims 8 and 9 depend from claim 7, claims 11 and 12 depend from claim 10, claims 14 and 15 depend from claim 13, and claims 17 and 18 depend from claim 16, Applicants respectfully submit the dependent claims are allowable for at least the reasons set forth for the independent claims.

Conclusion

Applicants believe other arguments may be made to distinguish the claims from the prior art references, but believe the rejections have sufficiently been overcome or traversed. Thus, claims 1-18 are in condition for allowance and such action is earnestly solicited. The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application. Please charge


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Examiner Thu Ha T Nguyen
TC/A.U. 2155

any shortages and credit any overcharges to our Deposit Account number 02-2666.

Respectfully submitted,
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